

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A method of driving the gate of an NFET to create a high side switch within a circuit having a charge pump circuit, a first transistor, a second transistor, a third transistor with a base, the first and third transistors having threshold currents, and each transistor electrically connected to an input signal, and a first and second resistor electrically connected to the transistors; comprising:
driving the charge pump circuit to create a local positive voltage within the circuit;
deactivating the first and second transistor by providing a input signal below the threshold current of the first transistor; and
pulling the base of the third transistor high via the first and second resistor to drive current from the local positive voltage into the gate of the NFET.
2. (original) The method of claim 1 wherein the charge pump is driven by an oscillator.
3. (original) The method of claim 1 wherein the circuit has a diode electrically associated with the local positive voltage.

4. (previously presented) The method of claim 3 wherein the diode holds the local positive voltage up when the input signal is high.

5. (original) The method of claim 1 wherein the circuit has a logic supply voltage used to supply extra voltage to the local positive voltage.

6. - 11. cancelled

12. (original) A method of driving a coil of an electrohydraulic valve with a circuit having a charge pump circuit, a first transistor, a second transistor, a third transistor with a base, the first and third transistors having threshold currents, and each transistor electrically connected to an input signal, and a first and second resistor electrically connected to the transistors; comprising:

driving the charge pump circuit to create a local positive voltage within the circuit;

deactivating the first and second transistor by providing a input signal below the threshold current of the first transistor; and

pulling the base of the third transistor high via the first and second resistor to drive current from the local positive voltage into a gate of a NFET thus driving the coil of the electrohydraulic valve.